

Title (en)

NUMERICALLY CONTROLLED AUTOMATIC WINDING MACHINE FOR WINDING AN ELECTRIC WIRE ON CLOSED SLOT STATORS

Title (de)

NUMERISCH GESTEUERTE AUTOMATISCHE WICKELMASCHINE FÜR DAS WICKELN EINER ELEKTRISCHEN LEITUNG AUF STATOREN MIT GESCHLOSSENEN NUTEN

Title (fr)

MACHINE A ENROULER AUTOMATIQUE A COMMANDE NUMERIQUE DESTINEE A ENROULER UN CABLE ELECTRIQUE SUR DES STATORS A FENTES FERMEES

Publication

**EP 1245072 B1 20041124 (EN)**

Application

**EP 01902627 A 20010103**

Priority

- IT 0100001 W 20010103
- IT MO20000001 A 20000105

Abstract (en)

[origin: WO0150580A1] A machine suited to realise automatically the complete winding of all coils directly on stators with "closed slots", comprising a plurality (A, B, C, Y, E, X, Z, H) of electronically controlled axes. The machine allows to form coils having uniformly arranged turns, which are adjacent to each other and do not mutually cross, wherein the layers are regularly overlapped, thereby ensuring that coils have all the same number of turns, the same length (in meters) of the electrically conductive wire, the same electric resistance; this implies, especially in the realisation of analogue electric motors, a higher efficiency and a more regular operation, and a noticeable reduction of the winding time. The machine is provided with a special needle (5) mounted horizontally on a vertical rod (9). The head portions of the stator (14) are appropriately configured in order to facilitate the winding operation and are used in combination with the machine.

IPC 1-7

**H02K 15/085**

IPC 8 full level

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CPC (source: EP)

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